

IN THE CLAIMS:

Please cancel Claims 22 to 30 without prejudice or disclaimer of subject matter and amend the claims as shown below. The claims, as pending in the subject application, read as follows:

1. (Currently Amended) A communication control apparatus comprising:
a communicator that performs a login to a different apparatus and receives login identification information for identifying the login from the different apparatus if the login is successful; and
a controller that, when connection on a lower layer of a communication with the different apparatus is disconnected while data is being transmitted to a the different apparatus, permits an upper layer of the communication to maintain a session the login identification information for a predetermined period of time, and, when connection on the lower layer is re-established within the predetermined period of time, permits the upper layer to continue the transmission of data by using the maintained login identification information.

2. (Currently Amended) A communication control apparatus according to claim 1, wherein the predetermined time is entered by a user, said communication control apparatus further comprising:
an accepting unit that accepts the predetermined time entered by the user;
and

a storage unit that stores a value indicating the setting means for setting said predetermined time.

3. (Currently Amended) A communication control apparatus according to claim 1, wherein said controller comprises:

a time determination means for determining unit that determines whether the predetermined time has elapsed;

a reconnection re=connection determination means for determining unit that determines whether a the different apparatus in a session has been reconnected to a communication line bus by the time said time determination means determines said predetermined time has elapsed;

a login determination means for unit that, when said reconnection means determination unit determines that said the different apparatus has been reconnected before said time determination unit determines that the predetermined time has elapsed, determines re-connected, determining whether a login to said the different apparatus has been successful;

a reception determination means for unit that, when said login determination means unit determines that said the login has been successful, determining whether said determines whether the different apparatus is capable of continuous reception; and

a transmission means for unit that, when said reception determination means unit determines that continuous reception has been enabled, transmitting transmits data to said the different apparatus by using the maintained login identification information.

4. (Currently Amended) A communication control apparatus according to claim 1, wherein said controller comprises:

a time determination means for determining unit that determines whether the predetermined time has elapsed; and

a clearing means for unit that, when said time determination means-unit determines that said the predetermined time has elapsed, clearing clears data that are being transmitted to the different apparatus.

5. (Original) A communication control apparatus according to claim 1, wherein said lower layer is a layer for ensuring the transmission of data, and detects a line disconnection or a line abnormality and performs a line disconnection process.

6. (Previously Presented) A communication control apparatus according to claim 1, wherein said lower layer includes a transport layer defined in an OSI layer 7 standard and below, and said upper layer includes a session layer defined in said OSI layer 7 standard and above.

7. (Previously Presented) A communication control apparatus according to claim 6, wherein SBP-2 is employed as a protocol for said transport layer and below.

8. (Previously Presented) A communication control apparatus according to claim 1, wherein IEEE 1394 is employed as a physical layer, which is the lowest layer of the lower layer.

9. (Previously Presented) A communication control apparatus according to claim 1, wherein said apparatus is a computer, and the different apparatus is a printer.

10. (Previously Presented) A communication control apparatus according to claim 1, wherein disconnection of said lower layer occurs when said different apparatus is physically disconnected from a communication line, or when a new apparatus is connected to said communication line.

11. (Currently Amended) A communication control method comprising:
a login step of performing, at one apparatus, a login to another apparatus;
a reception step of receiving, at the one apparatus, login identification
information for identifying the login from the another apparatus if the login is successful;
and
a control step of controlling, at the one apparatus, an upper layer of a
communication such that, when connection on a lower layer of the communication is disconnected while data is being transmitted from the one apparatus to the another apparatus, an the upper layer of the communication is permitted to maintain a session the login identification information for a predetermined period of time, and, when connection on the lower layer is re-established within the predetermined period of time, the upper layer is permitted to continue the transmission of data by using the maintained login
identification information.

12. (Currently Amended) A communication control method according to claim 11, wherein the predetermined time is entered by a user, said method further comprising:

an accepting step of accepting the predetermined time entered by the user;

and

a storage step of storing a value indicating the a setting step of setting said predetermined time in a memory.

13. (Currently Amended) A communication control method according to claim 11, wherein said controlling step comprises:

a time determination step of determining whether the predetermined time has elapsed;

a reconnection re-connection determination step of determining whether a different the another apparatus in a session has been reconnected to a communication line bus by the time it is determined at said time determination step that said predetermined time has elapsed;

a login determination step of, when it is determined at said re-connection reconnection determination step that said different the another apparatus has been re-connected reconnected before it is determined at said time determination step that the predetermined time has elapsed, determining whether a login to said different the another apparatus has been successful;

a reception determination step of, when it is determined at said login determination step that said the login has been successful, determining whether said different the another apparatus is capable of continuous reception; and

a transmission step of, when it is determined at said reception determination step that continuous reception has been enabled, transmitting data to said the another apparatus by using the maintained login identification information.

14. (Currently Amended) A communication control method according to claim 11, wherein said controlling step comprises:

a time determination step of determining whether the predetermined time has elapsed; and

a clearing step of, when it is determined at said time determination step that said the predetermined time has elapsed, clearing data that are being transmitted from the one apparatus to the another apparatus.

15. (Original) A communication control method according to claim 11, wherein said lower layer is a layer for ensuring the transmission of data, and detects a line disconnection or a line abnormality and performs a line disconnection process.

16. (Previously Presented) A communication control method according to claim 11, wherein said lower layer includes a transport layer defined in an OSI layer 7 standard and below, and said upper layer includes a session layer defined in said OSI layer 7 standard and above.

17. (Previously Presented) A communication control method according to claim 16, wherein SBP-2 is employed as a protocol for said transport layer and below.

18. (Previously Presented) A communication control method according to claim 11, wherein IEEE 1394 is employed as a physical layer, which is the lowest layer of the lower layer.

19. (Currently Amended) A communication control method according to claim 11, wherein said method is executed by a computer, and the different another apparatus is a printer.

20. (Currently Amended) A communication control method according to claim 11, wherein disconnection of said lower layer occurs when said different another apparatus is physically disconnected from a communication line, or when a new apparatus is connected to said communication line.

21. (Currently Amended) A machine-readable computer-readable storage medium on which is stored stores a communication control program executed by an a control apparatus, said communication control program comprising computer-executable code for the control apparatus to perform the steps of:

a login step of performing a login to another apparatus;
a reception step of receiving login identification information for identifying
the login from the another apparatus if the login is successful; and

a control step of code for controlling a communication that, when connection on a lower layer of the a communication with the another apparatus is disconnected while data is being transmitted to the another apparatus, permits an upper layer of the communication to maintain a session the login identification information for a predetermined period of time, and, when connection on the lower layer is re-established within the predetermined period of time, permits the upper layer to continue the transmission of data by using the maintained login identification information.

22. to 30. (Canceled)